

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A system for controlling the operations of at least one implantable medical device ("IMD") via an external device in data communication with the IMD, the system comprising:
at least one implantable medical device ("IMD") IMD providing therapy delivery,
said IMD including a processor controlling the delivery of therapy to a patient;
an external sensor module having at least one physiological sensor and
operational to continuously collect physiological data of the patient; and
said external sensor module continuously transmitting collected physiological
data signals to the IMD;
said IMD processor processing the physiological data to produce therapy
delivery control signals in implementation of dynamic closed loop self
monitoring therapy delivery.

2. (currently amended) The system of claim 1 wherein said at least one IMD is selected from the group consisting of a pacemaker, a defibrillator, a drug pump, and a neurological stimulator.

3. (previously amended) The system of claim 1 wherein said external sensor module is selected from the group consisting of a wristwatch, a ring, a patch, and a sock.

4. (previously amended) The system of claim 1 wherein said external sensor module transmits collected physiological data signals to the IMD over a communication channel including RF signals.

5. (previously amended) The system of claim 1 wherein said physiological sensor is one selected from the group consisting of pressure, oxygen saturation, cardiac acceleration, flow sensing, heart auscultations, and intracardiac impedance.

6.-7. (cancelled)

8. (new) A method, comprising:

providing therapy delivery using at least one implantable medical device ("IMD"),
said IMD including a processor controlling the delivery of therapy to a patient;
intermittently and automatically collecting physiological data of the patient using
an external sensor module having at least one physiological sensor;
substantially continuously transmitting the collected physiological data from said
external sensor module to the IMD; and
processing the collected physiological data to produce one or more therapy
delivery control signals in a dynamic, closed-loop, self-monitoring therapy
delivery regime.

9. (new) A method according to claim 8, wherein said at least one IMD comprises
at least one of: a pacemaker, a defibrillator, a drug pump, a deep brain stimulator, a
neurological stimulator.

10. (new) A method according to claim 8, wherein said external sensor module
comprises at least one of: a wristwatch, a ring, a patch, a sock.

11. (new) A method according to claim 8, wherein said external sensor module
transmits collected physiological data signals to the IMD over a communication channel
including RF signals.

12. (new) A method according to claim 8, wherein said at least one physiological
sensor comprises one of: a pressure sensor, an oxygen saturation sensor, a cardiac

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Group Art Unit: 3762

acceleration sensor, a flow sensor, a heart auscultation sensor, an transthoracic impedance sensing apparatus.

13. (new) A computer readable medium for storing instructions for performing a method, comprising:

instructions for delivering a therapy via at least one implantable medical device ("IMD"), said IMD including a processor controlling the delivery of therapy to a patient;

instructions for intermittently and automatically collecting physiological data of the patient using an external sensor module having at least one physiological sensor;

instructions for substantially continuously transmitting the collected physiological data from said external sensor module to the IMD; and

instructions for processing the collected physiological data to produce one or more therapy delivery control signals in a dynamic, closed-loop, self-monitoring therapy delivery regime.